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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,203	10/06/2005	Hans Hammer	U 015890-0	6308
140 7590 05/22/2009 LADAS & PARRY LLP 26 WEST 61ST STREET NEW YORK, NY 10023				
EXAMINER TAPOCAL, WILLIAM E				
ART UNIT 3744		PAPER NUMBER		
MAIL DATE 05/22/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/552,203

**Applicant(s)**

HAMMER ET AL.

**Examiner**

William E. Tapolcai

**Art Unit**

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s) Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s) Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. The finality of the Office action of February 13, 2009 is being withdrawn to render the Office action listed below.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,182,922 to Allread et al in view of U.S. Patent No. 6,969,094 to Frohling et al. Allread et al discloses the claimed invention of a motor vehicle having an air conditioning system including a compressor 14 and a heat exchanger 11 or 12 that are connected to each with ducting 23. The ducting clearly has at least two curves 62-65, and at least one curve is considered to be determined by the geometry of the engine compartment. Moreover, the recitation of the curves as being for damping and for the geometry of the engine compartment is considered to be a mere statement of intended use and not a positive structural limitation. However, Allread et al does not disclose that the pipe couplings are made entirely of metallic substance. Frohling et al teaches pipe couplings that are made entirely out of metallic substances, including the seals 13. See especially column 2, lines 55-63, where it is taught that the sealing ring 13 is made of a soft metal. Thus, it would be obvious to modify Allread et al so that the seal rings 36-39 are made of a metallic substance, in view of Frohling et al, to yield the predictable result that the couplings including the seals are made of a material that will not readily wear out. With regards to claim 3 and 5, refrigeration systems inherently include a throttling

device that reduces the pressure of the refrigerant. With regards to claim 4, the use of CO<sub>2</sub> as a refrigerant is well known, and thus to use CO<sub>2</sub> as the refrigerant in Allread et al would be an obvious expedient to one of ordinary skill in the refrigerant art. Filters as claimed in claim 6 are well known in refrigeration systems. Also, mufflers per se as claimed in claims 8, 9, 11, 16, and 17 for refrigeration systems are well known. The type of metal used is a matter of obvious choice, as no criticality or unexpected results are seen or have been disclosed for the use of diffusion-proof metal as recited in claim 10. The diameters of the ducting recited in claims 12 and 13 are considered to be mere matters of obvious design choice to one of ordinary skill in the art. The additional pipe couplings of claims 14 and 15 are considered to be disclosed in Allread et al.

4. Claims 1 and 3-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allread et al in view of U.S. Patent No. 55,174,651 to Schnell et al. Allread et al discloses the claimed invention as explained above except for the couplings being made entirely of a metallic substance. Schnell et al teaches that it is old to make couplings or clamps entirely out of a metallic substance. See, for example, column 6, lines 7-20, where it is stated that the entire clamp is fabricated of metal such as aluminum or steel or specialized alloys. Thus, it would be obvious to modify Allread et al so that the entire couplings are made of metallic substance, in view of Schnell et al, to yield the predictable result that the couplings including the seals are made of a material that will not readily wear out.

5. Applicant's arguments filed May 13, 2009 have been fully considered but they are not persuasive. The recitation in claims 1 and 18 of the curves being for damping and

the geometry of the engine compartment are considered to be too functional and not positive structural limitations.

6. The argument that the use of metallic couplings in Allread et al would result in unflexible pipe couplings must also necessarily apply to Applicant's own invention. Besides, it is believed that one of ordinary skill in the pipe coupling art would be able to make the metal couplings of the modified Allread et al device flexible enough to work.

7. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the metal couplings taught in either Schnell et al or Frohling et al would work with the refrigeration system of Allread et al.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William E. Tapolcai whose telephone number is (571) 272-4814. The examiner can normally be reached on Mon. - Thurs., 6:30 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William E. Tapolcai/  
Primary Examiner, Art Unit 3744

wet  
May 21, 2009